



STIC Search Report

EIC 1700

STIC Database Tracking Number: 101052

**TO: Eisa Elhilo
Location: CP3 9D34
Art Unit : 1751
August 15, 2003**

Case Serial Number: 10/052431

**From: Kathleen Fuller
Location: EIC 1700
CP3/4 3D62
Phone: 308-4290**

Kathleen.Fuller@uspto.gov

Search Notes



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher or contact:*

Kathleen Fuller, EIC 1700 Team Leader
308-4290, CP3/4-3D62

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC1700 CP3/4 3D62



SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: EISA EZHILO Examiner #: 784124 Date: 8/8/03
 Art Unit: 1751 Phone Number 30 5-0217 Serial Number: 10052431
 Mail Box and Bldg/Room Location: CPS/9034 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Novel couplers for use in oxidative hair dyeing
 Inventors (please provide full names): Mu-Hsin et al.

Earliest Priority Filing Date: 1/28/2001

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

please do search on the attached

formula.

Thank you

Examining ECHO
8/8/03

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: <u>K. Fuller</u>	NA Sequence (#) _____	STN <u>✓</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>11</u>	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>8/15/03</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>20</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>15</u>	Other _____	Other (specify) _____

=> FILE REG

FILE 'REGISTRY' ENTERED AT 09:28:39 ON 15 AUG 2003
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STRUCTURE FILE UPDATES: 13 AUG 2003 HIGHEST RN 566135-25-9
DICTIONARY FILE UPDATES: 13 AUG 2003 HIGHEST RN 566135-25-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 09:28:43 ON 15 AUG 2003
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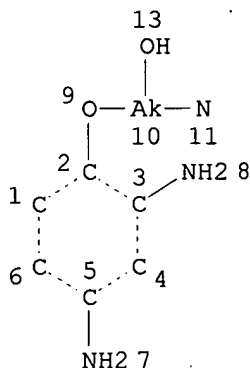
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FILE COVERS 1907 - 15 Aug 2003 VOL 139 ISS 7
FILE LAST UPDATED: 13 Aug 2003 (20030813/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE

L11 STR



38 structures from query

NODE ATTRIBUTES:

NSPEC IS RC AT 11
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L13 38 SEA FILE=REGISTRY SSS FUL L11
 L16 5 SEA FILE=HCAPLUS ABB=ON L13

5 CA references

=> D L16 ALL HITSTR

L16 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:574892 HCAPLUS
 DN 137:129544
 TI Couplers for oxidative coloration of hair
 IN Lim, Mu-Ill; Pan, Yuh-Guo; Anderson, James S.
 PA Clairol Incorporated, USA
 SO PCT Int. Appl., 49 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

applicants

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002058659	A1	20020801	WO 2002-US1636	20020118
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,				
	RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,				
	VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,				
	CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,				
	BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002144700	A1	20021010	US 2002-52296	20020118

PRAI US 2001-263551P P 20010123

OS MARPAT 137:129544

AB Couplers for hair coloring compns. for oxidative dyeing of hair are [3-(2,4-diaminophenoxy)-2-hydroxypropyl]trialkylammonium halides or sulfates. For example, a hair dye was formulated contg. [3-(2,4-diaminophenoxy)-2-hydroxypropyl]trimethylammonium bromide, p-toluenediamine (as primary dye intermediate), and conventional hair prepn. ingredients.

ST hair dye coupler quaternary ammonium compd

IT Hair preparations

(dyes; hair dyes contg. couplers and oxidn. dye primary intermediates)

IT 90-15-3, Naphthalen-1-ol 95-55-6, 2-Aminophenol 95-70-5, 2-Methylbenzene-1,4-diamine 95-88-5, 4-Chlorobenzene-1,3-diol 106-50-3, Benzene-1,4-diamine, biological studies 108-46-3, Benzene-1,3-diol, biological studies 123-30-8, 4-Aminophenol 150-75-4, 4-Methylaminophenol 591-27-5, 3-Aminophenol 608-25-3, 2-Methylbenzene-1,3-diol 1004-74-6, Pyrimidinetetramine 2380-86-1, 1H-Indol-6-ol 2835-95-2, 5-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 7469-77-4, 2-Methyl-naphthalen-1-ol 7575-35-1 16867-03-1, 2-Aminopyridin-3-ol 17672-22-9, 2-Amino-6-methylphenol 26021-57-8, 3,4-Dihydro-2H-1,4-benzoxazin-6-ol 41927-22-4, 4-Methyl-2-phenyl-2,4-dihydro-3H-pyrazol3-one 53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-(2-Hydroxyethylamino)2-methylphenol 70643-19-5, 2-(2,4-Diaminophenoxy)ethanol 83763-47-7 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 94082-77-6 129697-50-3 131311-66-5 155601-17-5 157469-54-0 220264-60-8 307493-94-3, 3-(2,4-Diaminophenoxy)propan-1-ol 329320-36-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyes contg. couplers and oxidn. dye primary intermediates)

IT 444155-06-0 444155-07-1 444155-09-3

444155-10-6 444155-12-8 444155-13-9

444155-14-0 444155-15-1 444155-16-2

444155-18-4 444155-20-8

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(novel couplers for oxidative hair dyes)

IT 19652-60-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of hair dye couplers)

IT 51-28-5, 2,4-Dinitrophenol, reactions 535-80-8, m-Chlorobenzoic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of hair dye couplers)

IT 10242-18-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of hair dye couplers)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bugaut; DE 3302534 A1 1983 HCAPLUS

(2) Rose; DE 2948093 A1 1981 HCAPLUS

IT 444155-06-0 444155-07-1 444155-09-3

444155-10-6 444155-12-8 444155-13-9

444155-14-0 444155-15-1 444155-16-2

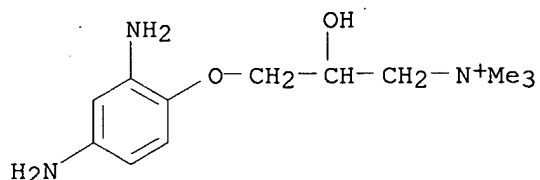
444155-18-4 444155-20-8

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(novel couplers for oxidative hair dyes)

RN 444155-06-0 HCAPLUS

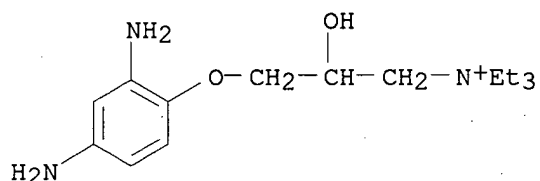
CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-trimethyl-,
bromide (9CI) (CA INDEX NAME)



● Br⁻

RN 444155-07-1 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-N,N,N-triethyl-2-hydroxy-,
chloride (9CI) (CA INDEX NAME)



● Cl⁻

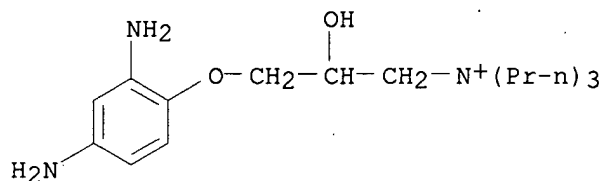
RN 444155-09-3 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-tripropyl-, propyl
sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 444155-08-2

CMF C18 H34 N3 O2



CM 2

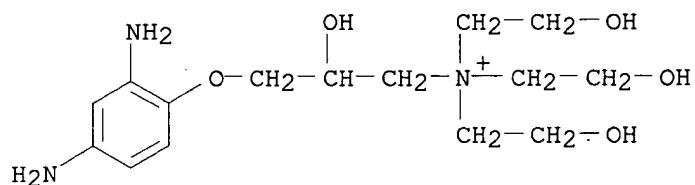
CRN 72640-73-4

CMF C3 H7 O4 S

n-Pr-O-SO₃⁻

RN 444155-10-6 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-tris(2-hydroxyethyl)-, bromide (9CI) (CA INDEX NAME)



● Br⁻

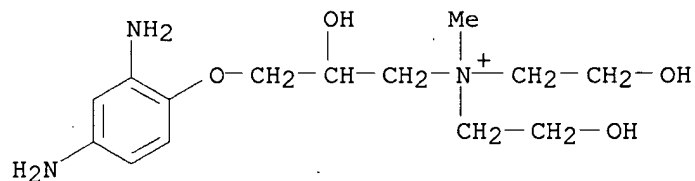
RN 444155-12-8 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N-bis(2-hydroxyethyl)-N-methyl-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 444155-11-7

CMF C14 H26 N3 O4



CM 2

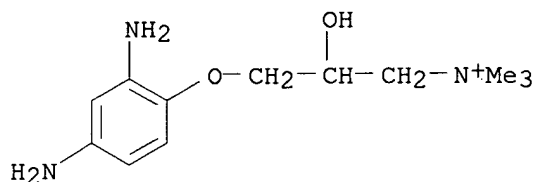
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

RN 444155-13-9 HCAPLUS

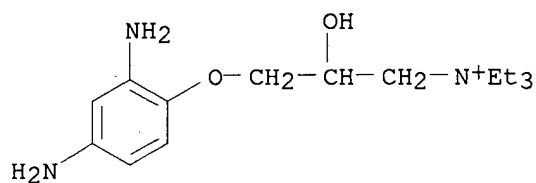
CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 444155-14-0 HCAPLUS

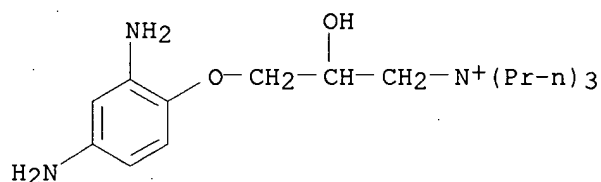
CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-N,N,N-triethyl-2-hydroxy-, bromide
(9CI) (CA INDEX NAME)



● Br⁻

RN 444155-15-1 HCAPLUS

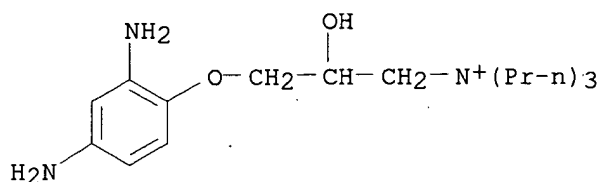
CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-tripropyl-,
bromide (9CI) (CA INDEX NAME)



● Br⁻

RN 444155-16-2 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-tripropyl-,
chloride (9CI) (CA INDEX NAME)



● Cl⁻

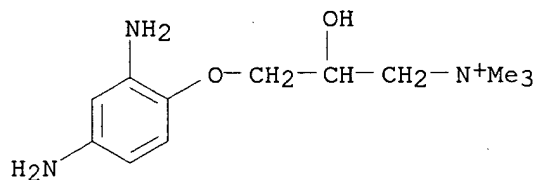
RN 444155-18-4 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-trimethyl-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 444155-17-3

CMF C12 H22 N3 O2



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

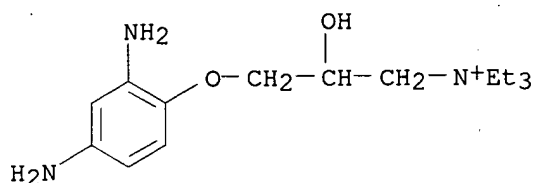
RN 444155-20-8 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-N,N,N-triethyl-2-hydroxy-, ethyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 444155-19-5

CMF C15 H28 N3 O2



CM 2

CRN 48028-76-8

CMF C2 H5 O4 S

Et-O-SO₃⁻

=> D L16 ALL HITSTR 2-5

L16 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:574889 HCAPLUS

DN 137:129541

TI Novel couplers for use in oxidative hair dyeing

IN Lim, Mu-Ill; Pan, Yuh-Guo; Anderson, James S.

PA Clairol Incorporated, USA

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

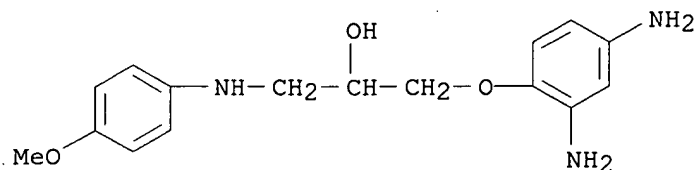
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002058656	A1	20020801	WO 2002-US1616	20020118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002138919	A1	20021003	US 2002-52431	20020118
PRAI	US 2001-263443P	P	20010123		

OS MARPAT 137:129541

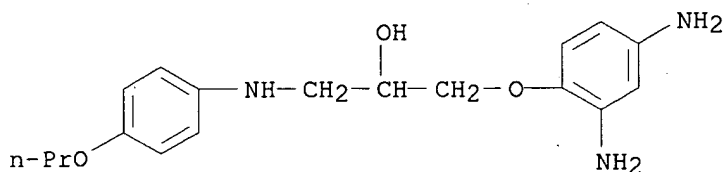
AB Couplers for hair coloring compns. for oxidative dyeing of hair are 1-(2,4-diaminophenoxy)-3-aminopropan-2-ol and derivs. and analogs thereof. The hair dyeing compns. of this invention contain oxidn. dye primary intermediates, the novel couplers of this invention, and other couplers. For example, a hair dye was formulated contg. 1-(2,4-diaminophenoxy)-3-(4-methoxyphenylamino)propan-2-ol and p-toluenediamine with conventional ingredients.

ST oxidative hair dye coupler diaminophenoxypropanol deriv
IT Hair preparations
(dyes; hair dyes contg. couplers and oxidn. dye primary intermediates)
IT 90-15-3, Naphthalen-1-ol 95-55-6, 2-Aminophenol 95-70-5,
2-Methylbenzene-1,4-diamine 95-88-5, 4-Chlorobenzene-1,3-diol
106-50-3, Benzene-1,4-diamine, biological studies 108-46-3,
Benzene-1,3-diol, biological studies 123-30-8, 4-Aminophenol 150-75-4,
4-Methylaminophenol 591-27-5, 3-Aminophenol 608-25-3,
2-Methylbenzene-1,3-diol 1004-74-6, Pyrimidinetetramine 2380-86-1,
1H-Indol-6-ol 2835-95-2, 5-Amino-2-methylphenol 2835-98-5,
2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 7469-77-4,
2-Methyl-naphthalen-1-ol 16867-03-1, 2-Aminopyridin-3-ol 17672-22-9,
2-Amino-6-methylphenol 26021-57-8, 3,4-Dihydro-2H-1,4-benzoxazin-6-ol
41927-22-4, 4-Methyl-2-phenyl-2,4-dihydro-3H-pyrazol3-one 53222-92-7,
3-Amino-2-methylphenol 55302-96-0, 5-(2-Hydroxyethylamino)2-methylphenol
70643-19-5, 2-(2,4-Diaminophenoxy)ethanol 83763-47-7 93841-24-8,
2-(2,5-Diaminophenyl)ethanol 94082-77-6 129697-50-3 131311-66-5
155601-17-5 157469-54-0 220264-60-8 307493-94-3,
3-(2,4-Diaminophenoxy)propan-1-ol 444160-86-5
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyes contg. couplers and oxidn. dye primary intermediates)
IT 329320-36-7 444160-72-9 444160-73-0
444160-75-2 444160-76-3 444160-77-4
444160-78-5 444160-79-6 444160-80-9
444160-81-0 444160-82-1 444160-83-2
444160-84-3 444160-85-4
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(novel couplers for oxidative hair dyes)
IT 10242-18-9P 19652-60-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of hair dye couplers)
IT 51-28-5, 2,4-Dinitrophenol, reactions 535-80-8, m-Chlorobenzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of hair dye couplers)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Buguat; DE 3302534 A1 1983 HCAPLUS
(2) Rose; DE 2948093 A1 1981 HCAPLUS
IT 444160-72-9 444160-73-0 444160-75-2
444160-76-3 444160-77-4 444160-78-5
444160-79-6 444160-80-9 444160-81-0
444160-82-1 444160-83-2 444160-84-3
444160-85-4
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(novel couplers for oxidative hair dyes)
RN 444160-72-9 HCAPLUS
CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[(4-methoxyphenyl)amino]- (9CI) (CA
INDEX NAME)



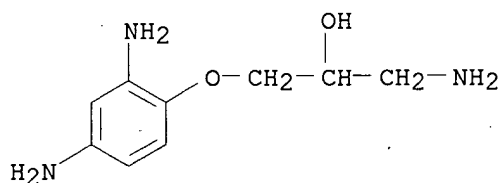
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CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[(4-propoxyphenyl)amino]- (9CI) (CA INDEX NAME)



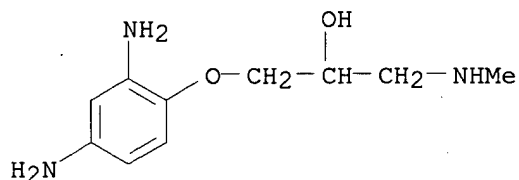
RN 444160-75-2 HCAPLUS

CN 2-Propanol, 1-amino-3-(2,4-diaminophenoxy)- (9CI) (CA INDEX NAME)



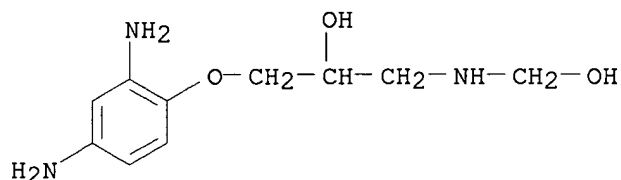
RN 444160-76-3 HCAPLUS

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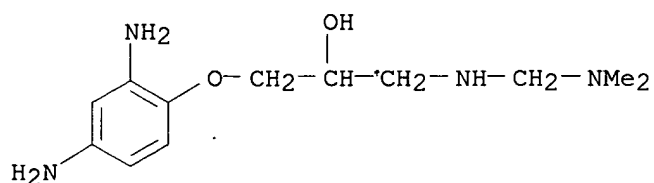
RN 444160-77-4 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[(hydroxymethyl)amino]- (9CI) (CA INDEX NAME)

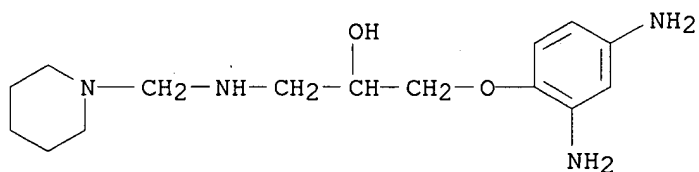


RN 444160-78-5 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[[(dimethylamino)methyl]amino]- (9CI) (CA INDEX NAME)

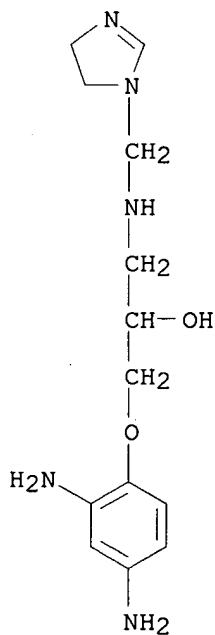


RN 444160-79-6 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[(1-piperidinylmethyl)amino]- (9CI)
(CA INDEX NAME)

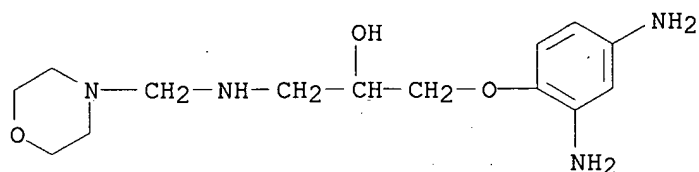
RN 444160-80-9 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[[4,5-dihydro-1H-imidazol-1-yl)methyl]amino]- (9CI) (CA INDEX NAME)



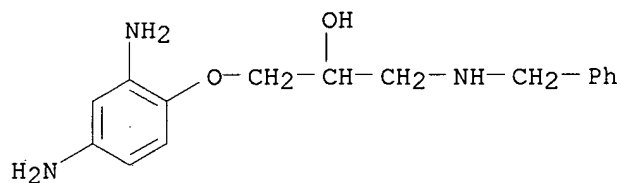
RN 444160-81-0 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[(4-morpholinylmethyl)amino]- (9CI)
(CA INDEX NAME)



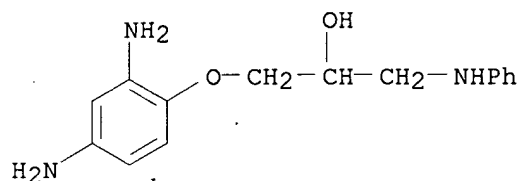
RN 444160-82-1 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[(phenylmethyl)amino]- (9CI) (CA INDEX NAME)



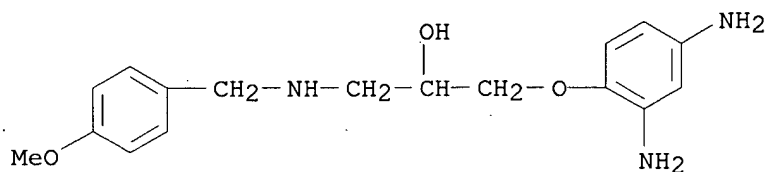
RN 444160-83-2 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-(phenylamino)- (9CI) (CA INDEX NAME)



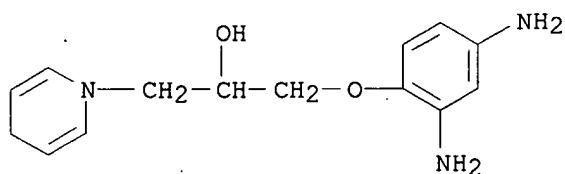
RN 444160-84-3 HCAPLUS

CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[[(4-methoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)



RN 444160-85-4 HCAPLUS

CN 1(4H)-Pyridineethanol, .alpha.-[(2,4-diaminophenoxy)methyl]- (9CI) (CA INDEX NAME)



L16 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1983:577512 HCAPLUS

DN 99:177512

TI Amino compounds useful as hair dyes

IN Bugaut, Andree; Genet, Alain

PA Oreal S. A. , Fr.

SO Ger. Offen., 93 pp.

CODEN: GWXXBX

DT Patent

LA German

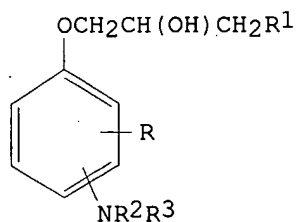
IC C07C093-14; A61K007-13

CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3302534	A1	19830804	DE 1983-3302534	19830126
	CH 661501	A	19870731	CH 1983-273	19830118
	FR 2520358	A1	19830729	FR 1983-847	19830120
	FR 2520358	B1	19850524		
	CA 1191849	A1	19850813	CA 1983-420080	19830124
	AT 8300220	A	19880515	AT 1983-220	19830124
	AT 387212	B	19881227		
	BE 895697	A1	19830725	BE 1983-209961	19830125
	AU 8310762	A1	19830804	AU 1983-10762	19830125
	AU 556627	B2	19861113		
	GB 2113685	A1	19830810	GB 1983-1981	19830125
	GB 2113685	B2	19851211		
	NL 8300267	A	19830816	NL 1983-267	19830125
	ES 519237	A1	19840716	ES 1983-519237	19830125
	JP 58164553	A2	19830929	JP 1983-10007	19830126
	GB 2129022	A1	19840510	GB 1983-31092	19831122
	GB 2129022	B2	19851211		
→	US 4888025	A	19891219	US 1985-742240	19850607
	AU 8666832	A1	19870416	AU 1986-66832	19861222
PRAI	LU 1982-83900		19820126		
	LU 1982-84391		19820927		
	US 1983-459964		19830121		
	GB 1983-1981		19830125		
GI					



- AB 3-Amino-1-(substituted phenoxy)-2-propanols (I; R = NO₂, NH₂; R₁ = NH₂, C1-4 alkyl- or hydroxyalkyl-substituted amino, morpholino, piperidino, quaternary ammonium; R₂, R₃ = H, C1-4 alkyl or hydroxyalkyl) are prepd. and used in hair dyeing formulations. Depending on the nature of R and its position with respect to NR₂R₃, I can be used as direct dyes (R = NO₂) or (R = NH₂) as oxidn. bases or couplers. Thus, reaction of 4,3-AcNH(O₂N)C₆H₃OH [7403-75-0] with epichlorohydrin to form the glycidyl ether (II) [24544-37-4], treatment of II with Et₂NH to give 4,3-AcNH(O₂N)C₆H₃OCH₂CH(OH)CH₂NEt₂ (III) [87563-65-3], and deacetylation of III gave 4,3-H₂N(O₂N)C₆H₃OCH₂CH(OH)CH₂NEt₂.HCl [87563-64-2], a direct dye. Hydrogenation of 2,4-H₂N(O₂N)C₆H₃OCH₂CH(OH)CH₂NMe₂ [87563-66-4], followed by N-acetylation, quaternization with MeI, and deacetylation gave 2,4-(H₂N)₂C₆H₃OCH₂CH(OH)CH₂N+Me₃Cl⁻.2HCl [87570-61-4], a coupler for oxidative dyeing compns. Nine other I were prepd. by these and similar methods, and dyeing formulations contg. these dyes are described in detail.
- ST aminophenoxypropanol hair dye; phenylenediamine deriv hair dye; nitroaminophenol ether hair dye; coupler oxidative hair dye; oxidn base hair dye
- IT Alcohols, uses and miscellaneous
RL: USES (Uses)
(amino, for direct and oxidative hair dyes)
- IT Hair preparations
(dyes, direct, aminophenoxypropanol derivs. as)
- IT Hair preparations
(dyes, oxidative, aminophenoxypropanol derivs. as bases and couplers for)
- IT 80062-31-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(epoxidn. of, by cyclodehydration)
- IT 97-60-9 7403-75-0 25351-89-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(etherification of, by epichlorohydrin)
- IT 87563-58-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrogenation of).
- IT **87563-48-2P 87563-50-6P 87570-61-4P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(manuf. and use of, as coupler for oxidative hair dyeing compns.)
- IT 87563-42-6P 87563-43-7P 87563-44-8P 87563-45-9P 87563-46-0P
87563-49-3P 87563-64-2P
RL: IMF (Industrial manufacture); PREP (Preparation)
(manuf. and use of, as direct dye for hair)
- IT 87563-47-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(manuf. and use of, as oxidn. base for hair dyeing compns.)

IT 87563-51-7P 87563-52-8P 87563-56-2P 87563-61-9P 87563-63-1P
87563-65-3P 87570-60-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and deacetylation of)

IT 87563-66-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and hydrogenation of)

IT 87563-53-9P 87563-55-1P 87563-60-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and hydrolysis of)

IT 87563-62-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and quaternization of)

IT 24544-37-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of, with amines)

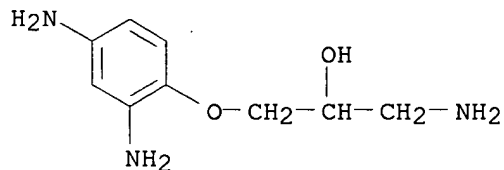
IT 78917-60-9P 87563-54-0P 87563-59-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of, with succinimide)

IT 87563-57-3P
RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

IT **87563-48-2P 87563-50-6P 87570-61-4P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(manuf. and use of, as coupler for oxidative hair dyeing compns.)

RN 87563-48-2 HCAPLUS

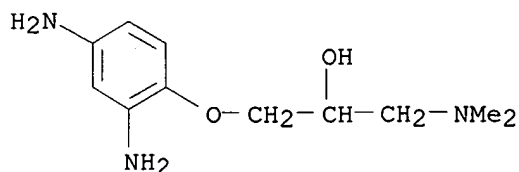
CN 2-Propanol, 1-amino-3-(2,4-diaminophenoxy)-, trihydrochloride (9CI) (CA
INDEX NAME)



● 3 HCl

RN 87563-50-6 HCAPLUS

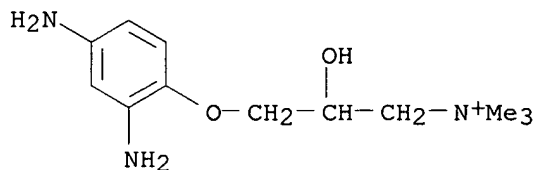
CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-(dimethylamino)-, trihydrochloride
(9CI) (CA INDEX NAME)



●3 HCl

RN 87570-61-4 HCAPLUS

CN 1-Propanaminium, 3-(2,4-diaminophenoxy)-2-hydroxy-N,N,N-trimethyl-, chloride, dihydrochloride (9CI) (CA INDEX NAME)

● Cl⁻

●2 HCl

L16 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1981:534387 HCAPLUS

DN 95:134387

TI Coupler components for oxidation hair dyes and use of hair dyeing agents containing them

IN Rose, David; Lieske, Edgar

PA Henkel K.-G.a.A., Fed. Rep. Ger.

SO Ger. Offen., 22 pp.

CODEN: GWXXBX

DT Patent

LA German

IC C07C093-14; A61K007-13

CC 40-10 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)
Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2948093	A1	19810611	DE 1979-2948093	19791129
	FI 8003435	A	19810530	FI 1980-3435	19801103
	DK 8004656	A	19810530	DK 1980-4656	19801103
	NO 8003288	A	19810601	NO 1980-3288	19801103
	EP 29964	A1	19810610	EP 1980-107210	19801120

R: AT, BE, CH, DE, FR, GB, IT, NL, SE

JP 56090043

A2

19810721

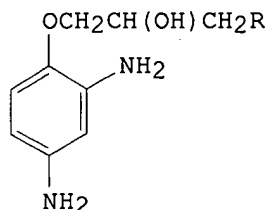
JP 1980-166824

19801128

PRAI DE 1979-2948093

19791129

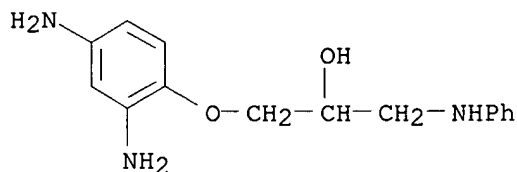
GI



I

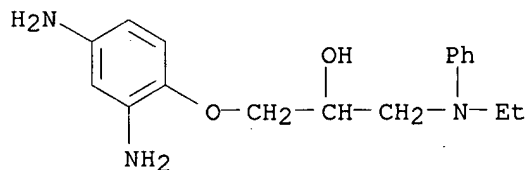
- AB Coupling components (I; R = NH₂Et, NHPh, NHCH₂Ph, NEtPh, OH, OEt, morpholino, piperidino) are prepd. and are used in oxidative hair dyeing compns. giving reddish brown to dark violet shades. Thus, 2-acetamido-4-nitrophenol [97-60-9] was condensed with epichlorohydrin [106-89-8], the resulting 1-(2-acetamido-4-nitrophenoxy)-2,3-epoxypropane [78917-60-9] treated with ethylamine [75-04-7], and the product deacetylated and reduced to give I (R = NH₂Et.3HCl) [78917-84-7]. Seven addnl. I were similarly prepd.
- ST aminophenoxyhydroxyalkylamine oxidative hair dye coupler; phenylenediamine oxidative hair dye coupler
- IT Hair preparations
(dyes, oxidative, couplers for, (hydroxypropoxy)phenylenediamine derivs. as)
- IT 78917-71-2P 78917-74-5P 78917-80-3P 78917-83-6P
78917-84-7P
RL: PREP (Preparation)
(oxidative hair dye coupler, manuf. of)
- IT 78917-77-8P
RL: IMF (Industrial manufacture); PREP (Preparation)
(oxidative hair dye coupler, prepn. of)
- IT 78917-65-4P 78917-68-7P
RL: PREP (Preparation)
(oxidative hair dye couplers, manuf. of)
- IT 78917-61-0P 78917-63-2P 78917-66-5P 78917-69-8P 78917-72-3P
78917-75-6P 78917-78-9P 78917-81-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deacetylation of)
- IT 78917-60-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction with ethylamine)
- IT 78917-62-1P 78917-64-3P 78917-67-6P 78917-70-1P 78917-73-4P
78917-76-7P 78917-79-0P 78917-82-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of)
- IT 100-46-9, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (acetamido nitrophenoxy)epoxy propane)
- IT 64-17-5, reactions 75-04-7, reactions 103-69-5 110-89-4, reactions
110-91-8, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (acetamidonitrophenoxy)epoxypropane)
IT 106-89-8, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with acetamidonitrophenol)
IT 62-53-3, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with acetamidonitrophenoxyepoxypropane)
IT 97-60-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with epichlorohydrin)
IT **78917-71-2P 78917-74-5P 78917-84-7P**
RL: PREP (Preparation)
(oxidative hair dye coupler, manuf. of)
RN 78917-71-2 HCAPLUS
CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-(phenylamino)-, trihydrochloride
(9CI) (CA INDEX NAME)



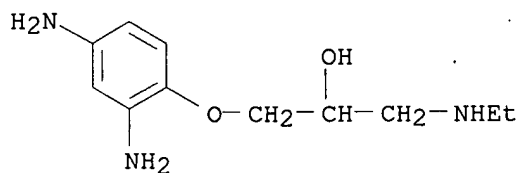
● 3 HCl

RN 78917-74-5 HCAPLUS
CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-(ethylphenylamino)-, trihydrochloride
(9CI) (CA INDEX NAME)



● 3 HCl

RN 78917-84-7 HCAPLUS
CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-(ethylamino)-, trihydrochloride (9CI)
(CA INDEX NAME)

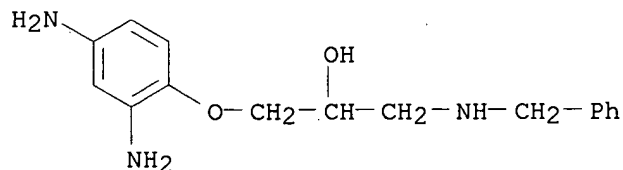


●3 HCl

IT 78917-77-8P

RL: IMF (Industrial manufacture); PREP (Preparation)
(oxidative hair dye coupler, prepn. of)

RN 78917-77-8 HCAPLUS

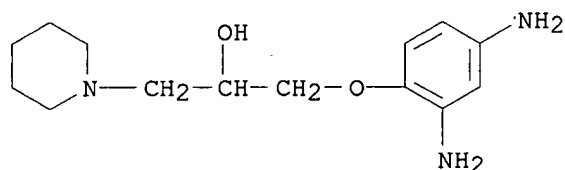
CN 2-Propanol, 1-(2,4-diaminophenoxy)-3-[(phenylmethyl)amino]-,
trihydrochloride (9CI) (CA INDEX NAME)

●3 HCl

IT 78917-65-4P 78917-68-7P

RL: PREP (Preparation)
(oxidative hair dye couplers, manuf. of)

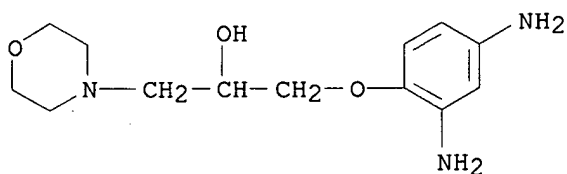
RN 78917-65-4 HCAPLUS

CN 1-Piperidineethanol, .alpha.-[(2,4-diaminophenoxy)methyl]-,
trihydrochloride (9CI) (CA INDEX NAME)

●3 HCl

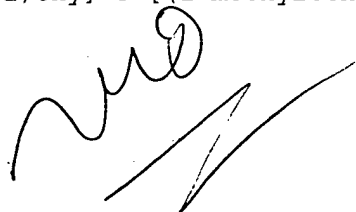
RN 78917-68-7 HCAPLUS

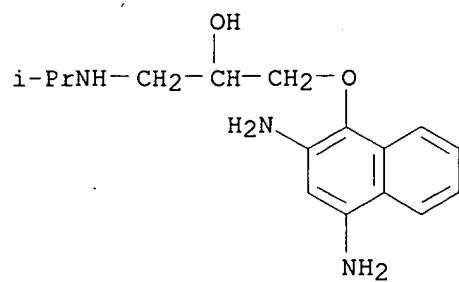
CN 4-Morpholineethanol, .alpha.-[(2,4-diaminophenoxy)methyl]-,
trihydrochloride (9CI) (CA INDEX NAME)



● 3 HCl

L16 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1977:596786 HCAPLUS
DN 87:196786
TI .beta.-Adrenergic receptors
AU Atlas, Daphne
CS Dep. Biol. Chem., Hebrew Univ., Jerusalem, Israel
SO Methods in Enzymology (1977), 46(Affinity Labeling), 591-601
CODEN: MENZAU; ISSN: 0076-6879
DT Journal
LA English
CC 9-13 (Biochemical Methods)
Section cross-reference(s): 2
AB For use as affinity labels of .beta.-receptors, several derivs., baed on the structures of norepinephrine, practolol, and propranolol were synthesized, including: 1,2-epoxy-3-norepinephrine propane, bromopractolol, 2,4-bromoacetamidopropranolol, 1-[(1-oxy-2-hydroxy-3-tert-butylamino)propane]-3-bromoacetamidoisoquinoline, 1-(oxy-2-hydroxy-3-isopropylamine)propane-3-bromoacetamidoisoquinoline, N-(2-hydroxy-3-naphthyloxypropyl)ethylenediamine, N-(2-hydroxy-3-naphthyloxypropyl)-N'-bromoacetylenediamine, and bromomethyl-(2-hydroxy-3-naphthoxypropylaminomethyl)ketone. The compds. were tested as .beta.-blockers by their capacity to inhibit turkey erythrocyte .beta.-receptor-dependent adenylate cyclase activity, and their relative activities are described.
ST beta adrenergic receptor affinity labeling
IT Receptors
(.beta.-adrenergic, affinity labels for, prepn. of)
IT 27684-79-3P 59479-83-3P 59479-84-4P 59479-85-5P 59479-86-6P
64888-07-9P **64888-08-0P** 64888-09-1P 64888-10-4P
RL: PREP (Preparation)
(prepn. of, .beta.-adrenergic receptor affinity labeling in relation to)
IT **64888-08-0P**
RL: PREP (Preparation)
(prepn. of, .beta.-adrenergic receptor affinity labeling in relation to)
RN 64888-08-0 HCAPLUS
CN 2-Propanol, 1-[(2,4-diamino-1-naphthalenyl)oxy]-3-[(1-methylethyl)amino]-(9CI) (CA INDEX NAME)





and
3